



LED Par 36 COB RGBW 12W,

LED Par 46 COB RGBW 20W,

LED Par 64 COB RGBW 60W,

LED Par 56 COB RGBW 30W

LED PAR

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## 1 General information

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

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### 1.1 Further information

On our website ([www.thomann.de](http://www.thomann.de)) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

## 1.2 Notational conventions

This manual uses the following notational conventions:

### **Letterings**

The letterings for connectors and controls are marked by square brackets and italics.

**Examples:** *[VOLUME]* control, *[Mono]* button.

### **Displays**

Texts and values displayed on the device are marked by quotation marks and italics.

**Examples:** '24ch', 'OFF'.

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### Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

**Example:**

- 1.**  Switch on the device.
- 2.**  Press *[Auto]*.  
⇒ Automatic operation is started.
- 3.**  Switch off the device.

### Text input

Text inputs that are carried out on the device are indicated by typewriter font.

**Example:** 2323

### Cross-references

References to other locations in this manual are identified by an arrow and the specified page number. In the electronic version of the manual, you can click the cross-reference to jump to the specified location.

Example: See  'Cross-references' on page 8.

## 1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
<b>DANGER!</b>	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
<b>WARNING!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
<b>NOTICE!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – suspended load.
	Warning – danger zone.

## 2 Safety instructions

### Intended use

This device is intended to be used as an electronic illumination effect using LED technics. The device is designed for professional use and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

### Safety



#### **DANGER!**

#### **Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.



#### **DANGER!**

#### **Electric shock caused by high voltages inside**

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.



**DANGER!**

**Electric shock caused by short-circuit**

Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



**WARNING!**

**Eye damage caused by high light intensity**

Never look directly into the light source.



**WARNING!**

**Risk of epileptic shock**

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.



### **NOTICE!**

#### **Risk of fire**

Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.



### **NOTICE!**

#### **Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.



**NOTICE!**

**Power supply**

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

## 3 Features

Besondere Eigenschaften des Geräts:

- One four-colour chip on-board LED
- Stand-alone, master-slave or DMX mode operation
- Operating via buttons and display on the unit
- Robust metal housing
- Universal two-piece mounting bracket for hanging or standing installation
- Suitable for use in clubs, bars, theatres, exhibitions, etc. or for architectural lighting

## 4 Installation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.



### WARNING!

#### **Risk of injury caused by falling objects**

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

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### **NOTICE!**

#### **Risk of overheating**

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



### **NOTICE!**

#### **Use of stands**

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

**NOTICE!****Possible data transmission errors**

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

**Mounting options**

You can install the device standing or hanging upside down. When in use, the device must be mounted at a solid surface or clamped to an approved truss. Use the openings of the two-piece bracket provided for mounting.

Work from a stable platform whenever you install or move the device or when you perform any kind of maintenance. Block access under the work area.

The safety cable must be attached to the bracket.

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*Please note that this device must not be connected to a dimmer.*

## 5 Starting up

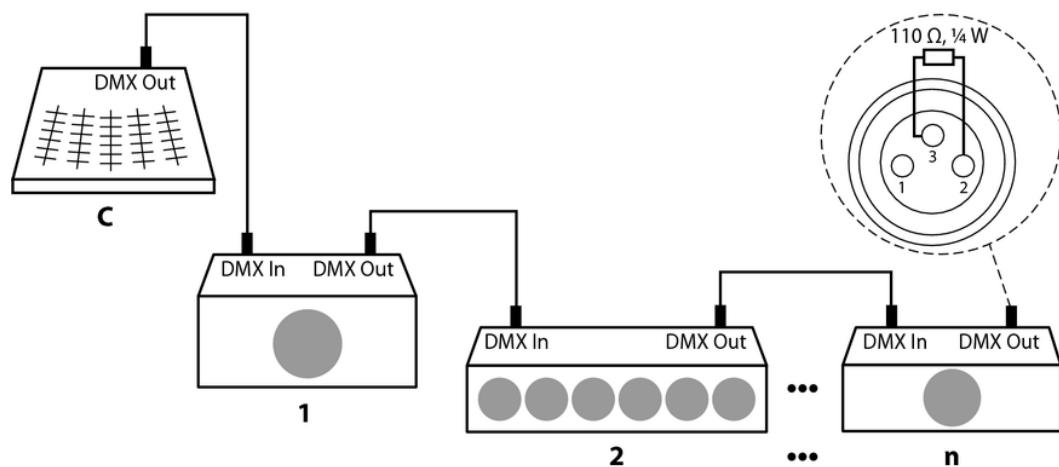
Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

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## Connections in DMX mode

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor ( $110\ \Omega$ ,  $\frac{1}{4}\ W$ ).



### **Connections in master/slave mode**

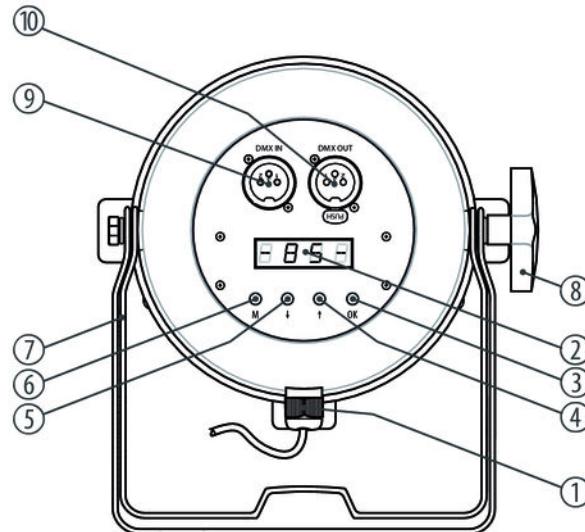
When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

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## 6 Connections and operating elements

### Rear panel



1	Power cord.
2	Display.
3	<i>[OK]</i> button Confirms a selected value.
4, 5	Buttons ↑, ↓ Increases / decreases the displayed value by one.
6	<i>[M]</i> button Calls the main menu or a submenu.
7	Two-piece bracket for hanging or installation and for securing the safety-rope.
8	Locking screws for the mounting bracket.

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9	<i>[DMX IN]</i> DMX input.
10	<i>[DMX OUT]</i> DMX output.

## 7 Operating

### 7.1 Starting up the device

Connect the unit to the power grid to start the operation. After a few seconds, the display shows a running reset. Then the unit is ready for use.

### 7.2 Main menu

Press **[M]** to activate the main menu and to select an operating mode. Use the arrow keys to change the respectively indicated value. When the display shows the desired value, press **[OK]**.

If you don't press any button for about 1 minute, the unit returns to the previous mode. The set values are retained even when the device is disconnected from the mains power.

## DMX mode

Press [M]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'MODE'. Press [OK]. Now use the arrow keys to select one of the following DMX operating modes:

- '4CH' (four channels)
- '6CH' (six channels)
- '8CH' (eight channels)

This setting is only relevant if the unit is controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

**DMX address**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'DMX'. Press [OK]. Now you can set the number of the first DMX channel to be used by the device (DMX address). Select a value between 1 and 512 with the arrow keys (display shows 'A001'... 'A512').

When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the various DMX modes.

Mode	Highest possible DMX address
4-channel	509
6-channel	507
8-channel	505

## Operating mode 'Show/Master'

Press [M]. Press one of the arrow keys repeatedly until the display shows 'LINE'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'MA'. Press [OK]. Now you can select one of the preprogrammed automatic shows. Use the arrow keys to select a value between 1 and 42 (display shows 'P-01' ... 'P-42').

The automatic show can only be activated on the unit, that operates as Master.

This setting is only relevant if the unit is not controlled via DMX. The device can work in stand-alone mode or control connected devices of the same type, which must be configured as slave. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

## Operating mode 'Slave'

Press [M]. Press one of the arrow keys repeatedly until the display shows 'LINE'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'SL'. Press [OK]. Now you can set the number of the device through which it is addressed as Slave by the Master. Select a value between 1 and 512 with the arrow keys (display shows 'A001' ... 'A512').

This setting is only relevant if the unit works as slave controlled by a master, but not via DMX. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

**Programme speed**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'SPEE'. Press [OK]. Now you can set the programme speed for the preprogrammed automatic shows. Select a value between 0 and 255 (display shows 'T000' ... 'T255').

The programme speed can be set only if the microphone sensitivity is set to 'OFF', i.e. the microphone is switched off.

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

**Brightness**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'DIMM'. Press [OK]. Now you can set the brightness for the preprogrammed automatic shows. Use the arrow keys to select a value between 0 and 255 (display shows 'D000' ... 'D255').

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

## **Microphone sensitivity**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'MIC'. Press [OK]. Now you can adjust the sensitivity of the built-in microphone for the sound control. Use the arrow keys to select either 'OFF' (microphone off) or a value between 1 and 30 (display shows 'M-01'... 'M-30').

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

## **Manual test**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'TEST'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'RED', 'GREEN', 'BLUE', 'WHITE' or 'STRO'. Press [OK]. Now you can adjust the brightness of the red, green, blue or white LEDs, each in a range of 0 to 255, or select the flashing speed in a range of 0 to 24.

This operation mode is also suitable to produce constant or flashing light of a colour mixed from the four LED colours without DMX control.

When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

**Fade speed**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'FADE'. Press [OK]. Now you can adjust the fade speed of the preprogrammed automatic shows. Select a value between 1 and 7 with the arrow keys (display shows 'F-01' ... 'F-07').

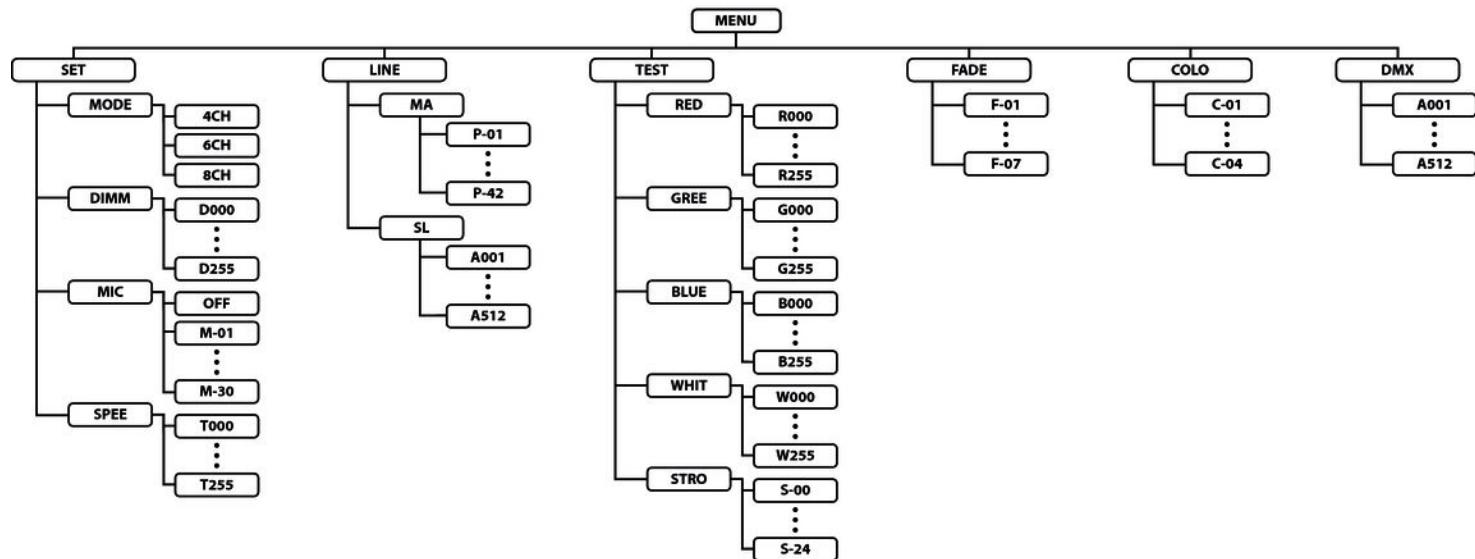
This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection and to return to the main menu. To return to the main menu without any changes, press [M].

**Colour selection**

Press [M]. Press one of the arrow keys repeatedly until the display shows 'COLO'. Press [OK]. Now you can set the a basic colour for the preprogrammed automatic shows. Select a value between 1 and 4 with the arrow keys (display shows 'C-01' ... 'C-04').

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection and to return to the main menu. To return to the main menu without any changes, press [M].

## 7.3 Menu overview



## 7.4 Functions in 4-channel DMX mode

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %)
2	0...255	Intensity green (0 % to 100 %)
3	0...255	Intensity blue (0 % to 100 %)
4	0...255	Intensity white (0 % to 100 %)

## 7.5 Functions in 6-channel DMX mode

Channel	Value	Function
1	Operating mode selection	
	0...63	Constant colour, colour hue is set via channels 2 to 5
	64...127	Automatic colour change with 7 colours, channels 2 to 5 without function

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Channel	Value	Function
	128...191	Automatic colour change with 12 colours, channels 2 to 5 without function
	192...255	Automatic colour change with 4 colours, channels 2 to 5 without function
2	0...255	Intensity red (0 % to 100 %), if channel 1 = 0...63
3	0...255	Intensity green (0 % to 100 %), if channel 1 = 0...63
4	0...255	Intensity blue (0 % to 100 %), if channel 1 = 0...63
5	0...255	Intensity white (0 % to 100 %), if channel 1 = 0...63
6	Effects speed	
	0...10	No automatic colour change
	11...100	Automatic colour change as set via channel 1, decreasing speed from fast to slow
	101...150	No automatic colour change
	151...255	Automatic colour change as set via channel 1, speed randomly changing

## 7.6 Functions in 8-channel DMX mode

Channel	Value	Function
1	0...255	Intensity Red (0 % to 100 %), if channel 5 = 0...15 and channel 7 = 0...31
2	0...255	Intensity Green (0 % to 100 %), if channel 5 = 0...15 and channel 7 = 0...31
3	0...255	Intensity Blue (0 % to 100 %), if channel 5 = 0...15 and channel 7 = 0...31
4	0...255	Intensity White (0 % to 100 %), if channel 5 = 0...15 and channel 7 = 0...31
5	Fixed colour pattern	
	0...15	No fixed colour and movement pattern
	16...255	One of 31 fixed colour patterns, channels 1, 2, 3, 4, 6 and 7 without function
6	Strobe effect	
	0...15	Full brightness, no strobe effect
	16...255	Strobe effect, increasing speed, when channel 5 = 0...15, channels 1 to 4 define the colour
7	Operating mode selection	

Channel	Value	Function
	0...31	Constant colour, the hue is set by channels 1 to 4
	32...63	Fade-out effect, speed controlled by channel 6, channels 1 to 4 define the colour if channel 5 = 0...15
	64...95	Fade-in effect, speed controlled by channel 6, channels 1 to 4 define the colour if channel 5 = 0...15
	96...127	Fade-in-out effect, speed controlled by channel 6, channels 1 to 4 define the colour if channel 5 = 0...15
	128...159	Auto-mix effect, speed controlled by channel 6, channels 1 to 4 without function if channel 5 = 0...15
	160...191	Chase (4 colours), speed controlled by channel 6, channels 1 to 4 without function if channel 5 = 0...15
	192...223	Chase (12 colours), speed controlled by channel 6, channels 1 to 4 without function if channel 5 = 0...15
	224...255	Sound-controlled colour change (12 colours), channels 1 to 6 without function
8	0...255	Dimmer (0 % to 100 %)

## 8 Technical specifications

	Item no. 333906	Item no. 334993	Item no. 334994	Item no. 334995
Illuminant	1 four-colour chip on-board LED			
	20 W	12 W	30 W	60 W
Number of DMX channels	depending on operating mode 4, 6 or 8,			
Dispersion angle	24 °	60 °	60 °	60 °
Operating supply voltage	100...240 V ~ (AC), 50/60 Hz			
Power consumption	20 W	12 W	36 W	56 W
Dimensions (W × D × H)	282 mm × 195 mm × 165 mm (without bracket)	250 mm × 170 mm × 122 mm (without bracket)	425 mm × 250 mm × 200 mm (incl. bracket)	505 mm × 290 mm × 230 mm (incl. bracket)
Weight	1.43 kg	0.98 kg	2.06 kg	2.93 kg

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## 9 Plug and connection assignments

### Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

### DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.



Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX-, 'cold signal')
3	Signal (DMX+, 'hot signal')

## 10 Troubleshooting



### NOTICE!

#### Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

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Symptom	Remedy
The unit does not work, no light.	Check the mains connection and the fuse.
No response to the DMX controller.	<ol style="list-style-type: none"><li>1. Check the DMX ports and cables for proper connection.</li><li>2. Check the address settings and the DMX polarity.</li><li>3. Try using another DMX controller.</li><li>4. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or interference to DMX interface circuits.</li></ol>

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at [www.thomann.de](http://www.thomann.de).

## 11 Cleaning

### Optical lenses

Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

### Fan grids

The fan grids of the device must be cleaned on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.

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## 12 Protecting the environment

### Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

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